



Bedford Site

Resuscitation Training E-Learning 2023

Adults & Children (incl newborn)

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Resuscitation Training

This type of training is for Nursing, Allied Health Professionals and Medical staffing only.

Key Objectives:

1. Recognition and Initial Management of the Collapsed Person.
2. To be able to perform basic life support for Adults
3. to be able to place a person into the recovery position
4. Recognition and Management of the Choking Adult
5. Recognition and Management of Anaphylaxis

Recognition and initial management of the collapsed person

Anyone can collapse anywhere and at any time. It is important that all staff have a plan of action in case this happens. Clinical staff will have additional skills which may be used during the assessment and initial management of the collapsed person and ward based staff have specialist equipment available to them. This guideline outlines the initial actions to be taken.

6 step process

The majority of collapses are not serious and are managed easily using the following six steps. These steps are the same regardless of what has happened. Management of the situation will depend on the outcome of the assessment.

1. **DANGER** – think about the risks to you and the collapsed person. Common risks include slips, trips and falls, back injury, blood and bodily fluids and exposure to aggressive behaviour.
2. **RESPONSE** – can the person be roused with tapping their shoulders, calling their name or giving them a command – “open your eyes”? A person who responds may have fainted or may be more unwell and need to go to the Emergency Department.
3. **SHOUT** for assistance – anyone will do at this point either another member of staff or member of the public.

Please note that the process for Covid-19 differs for the assessment and delivery of CPR, please see appendix A for amendments

4. **AIRWAY** – look in the mouth. Is there something solid there which can be removed by turning the person onto their side and slapping them between the shoulder blades? Is there fluid which needs to be drained out by positioning them on their side? False teeth should be left in the mouth – if loose remove them and any other loose teeth should be removed.
Has the tongue dropped back in the mouth?



Place your fingers under the chin and lift the chin upwards,



(head tilt, chin lift)

5. **BREATHING** – is he breathing normally? Occasional gasps or breaths do not count as breathing. **Look** at the chest, **Listen** and **Feel** for breathing by placing your cheek near to the person’s mouth. Do this for a

maximum of ten seconds



6. **CIRCULATION** – is he moving at all? What is their colour? Health care workers can check for the carotid pulse in the neck. This assessment should take place simultaneously with breathing assessment and should take no longer than 10 seconds

Once you have carried out these six steps you will know whether the person is conscious or unconscious, breathing or not breathing

Next steps

For all unconscious people you must call for definitive help immediately, every minute matters.

In hospital dial 2222 and state “medical emergency Team for patient’s that aren’t in cardiac arrest but you feel you need urgent help, stating the location. For patient’s you believe aren’t breathing/absent pulse state “adult (or Paediatric) cardiac arrest and location.” Repeat the message twice, slowly – take a deep breath and count to 10 if you are panicking. The medical emergency and cardiac arrest team can get to all areas of the Trust well within a few minutes so you will not have to manage the situation for long.

Out of hospital dial 999 or 112 and ask for “the ambulance service”. They will want to know a lot more about the person who has collapsed but it is essential that you give key information early in the conversation so for example, you may want to state “A man is lying on the pavement and he is not breathing”. Put your mobile onto speakerphone as the ambulance service operator will guide you through each step you need to take. In a community setting you may have to wait some time for an ambulance to arrive.

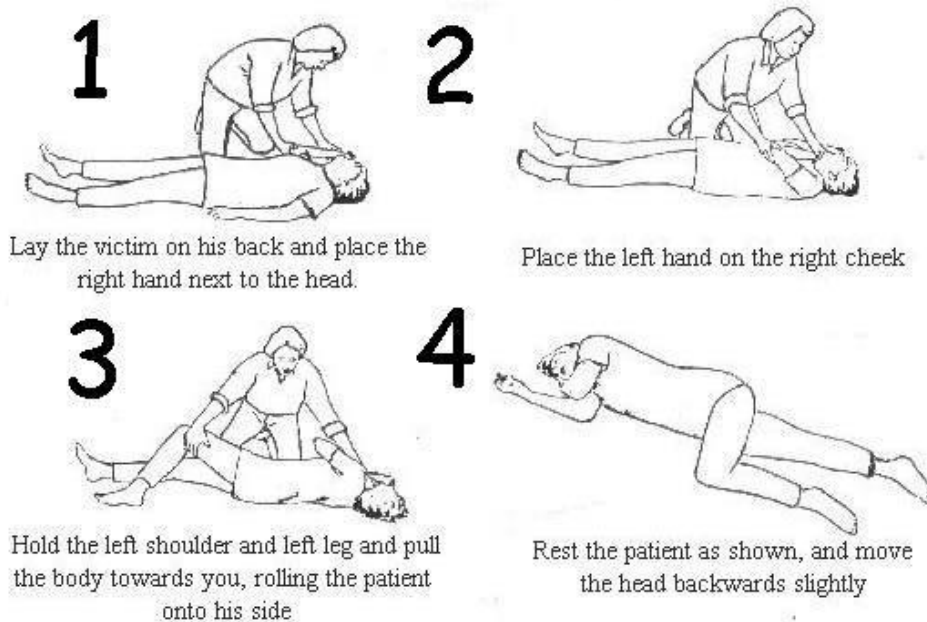
For the unconscious person you now have two choices:

1 **The breathing person**

Turn him onto his side to ensure that the tongue is falling forward rather than falling back and blocking the airway. Also, any fluid such as vomit will drain out rather than draining into the airway. This is known as the recovery position and is very easy to do. If you are worried about a possible neck injury you should keep him on his back unless his airway is blocked.

The Recovery Position

How to do it



Stay with the person and keep him warm if possible. If you know the person, you may know about important medical history and you should let the team know this when they arrive.

2
3

2 The non-breathing person (or person making the occasional gasp)

Start chest compressions immediately. Link or cross your hands placing the base of the palm in the centre of the chest, keep your elbows straight and position yourself immediately above the centre of the chest. Push firmly on the chest until the chest moves about 5-6cm. Do this at a rate of about two per second also ensuring the chest recoils between each compression. **THE BETTER THE CPR THE BETTER THE POTENTIAL OUTCOME!**



In the clinical setting you will have equipment and will be able to provide ventilations as well as compressions. **The ratio will be thirty compressions to two ventilations.** If however you have reached thirty compressions and the bag valve mask and someone to assist you to use it have not arrived – provide compression only CPR as this will suffice until equipment and/ or team arrive.

In the non-clinical setting you are unlikely to have equipment so you will perform continuous compressions until help arrives.

This is a very tiring process, it is essential that you take turns with colleagues to deliver high quality compressions. The lone rescuer must do their best.

This is a guideline which you will have to use in possibly very stressful circumstances. Do your best and remember that you are not expected to be perfect. If in doubt and the person looks lifeless start compressions. More information is available on www.resus.org.uk/guidelines

Further Reading – www.resus.org.uk

Policies for further reading and available on the Bedford Hospital intranet:

Treatment escalation policy

Resuscitation in the Emergency Department.

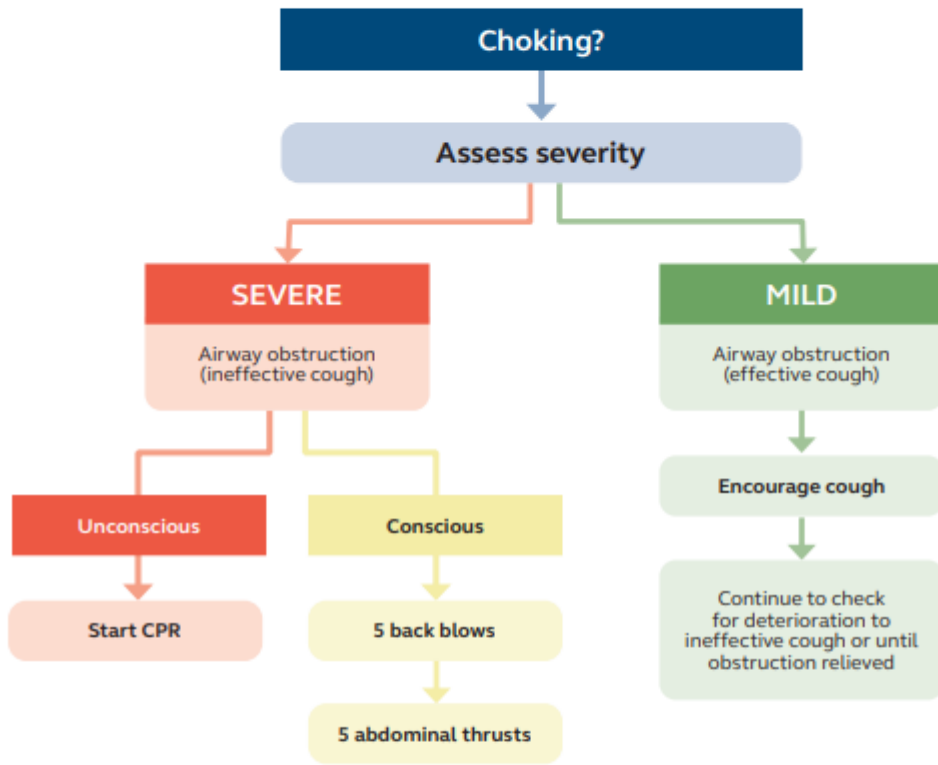
Trust Resuscitation Policy including deteriorating patient.

Management of Maternal Collapse.

Severely ill Pregnant Women and Use of High Dependency Care and MEOWS early warning tool.

Contact: Cardiac Arrest Prevention Team: resuscitation@bedfordhospital.nhs.uk

Adult choking



Paediatric Basic Life Support

Rescuers who have been taught adult BLS, and have no specific knowledge of paediatric resuscitation, should use the adult sequence. The following modifications to the adult sequence will make it more suitable for use in children:

- Give 5 initial rescue breaths before starting chest compression.
- If you are on your own, perform CPR for 1 min before going for help.
- Compress the chest by at least one-third of its depth, approximately 4 cm for an infant and approximately 5 cm for an older child. Use two fingers for an infant under 1 year; use one or two hands for a child over 1 year to achieve an adequate depth of compression.

The compression rate should be 100–120 min⁻¹.

To learn more about adult BLS, take a look at our [adult BLS guidelines](#).

Those with a duty to respond to paediatric emergencies (usually healthcare professional teams) should use the following sequence:

1. Ensure the safety of rescuer and child.
2. Check the child's responsiveness:
 - Gently stimulate the child and ask loudly, 'Are you all right?'
- 3A. If the child responds by answering or moving:
 - Leave the child in the position in which you find him (provided he is not in further danger).
 - Check his condition and get help if needed.
 - Reassess him regularly.
- 3B. If the child does not respond:
 - Shout for help.
 - Turn the child onto his back and open the airway using head tilt and chin lift:
 - Place your hand on his forehead and gently tilt his head back.
 - With your fingertip(s) under the point of the child's chin, lift the chin.
 - Do not push on the soft tissues under the chin as this may block the airway.
 - If you still have difficulty in opening the airway, try the jaw thrust method: place the first two fingers of each hand behind each side of the child's mandible (jaw bone) and push the jaw forward.

Have a low threshold for suspecting injury to the neck. If you suspect this, try to open the airway using jaw thrust alone. If this is unsuccessful, add head tilt gradually until the airway is open. Establishing an open airway takes priority over concerns about the cervical spine.

4. Keeping the airway open, look, listen, and feel for normal breathing by putting your face close to the child's face and looking along the chest:

Look for chest movements.

Listen at the child's nose and mouth for breath sounds.

Feel for air movement on your cheek.

In the first few minutes after cardiac arrest a child may be taking infrequent, noisy gasps. Do not confuse this with normal breathing. Look, listen, and feel for no more than 10 seconds before deciding – if you have any doubts whether breathing is normal, act as if it is not normal.

5A. If the child IS breathing normally:

Turn the child onto his side into the recovery position (see below).

- Send or go for help – call the relevant emergency number. Only leave the child if no other way of obtaining help is possible.
- Check for continued normal breathing.

5B. If the breathing is NOT normal or absent:

- Carefully remove any obvious airway obstruction.
- Give 5 initial rescue breaths.
- it is common in healthcare environments to have access to bag-mask devices. Providers trained in their use should use them as soon as they are available.
- While performing the rescue breaths note any gag or cough response to your action. These responses, or their absence, will form part of your assessment of 'signs of life', described below.

Rescue breaths for an infant:

- Ensure a neutral position of the head (as an infant's head is usually flexed when supine, this may require some extension) and apply chin lift.
- Using a bag-valve-mask, cover the mouth and nasal apertures of the infant with an appropriately sized face mask, making sure you have a good seal. Squeeze the bag steadily over 1 second sufficient to make the chest rise visibly. This is the same time period as in adult practice.
- repeat this sequence four more times.

Rescue breaths for a child over 1 year:

- Ensure head tilt and chin lift.
- Using a bag-valve-mask, cover the mouth and nasal apertures of the child with an appropriately sized face mask, making sure you have a good seal. Squeeze the bag steadily over 1 second sufficient to make the chest rise visibly. This is the same time period as in adult practice.
- repeat this sequence four more times.
- Identify effectiveness by seeing that the child's chest has risen and fallen in a similar fashion to the movement produced by a normal breath.

For both infants and children, if you have difficulty achieving an effective breath, the airway may be obstructed:

- Open the child's mouth and remove any visible obstruction. Do not perform a blind finger sweep.
- Ensure that there is adequate head tilt and chin lift but also that the neck is not over extended.
- If head tilt and chin lift has not opened the airway, try the jaw thrust method.
- Make up to 5 attempts to achieve effective breaths. If still unsuccessful, move on to chest compression.

6. Assess the circulation (signs of life):

Take no more than 10 seconds to:

- Look for signs of life. These include any movement, coughing, or normal breathing (not abnormal gasps or infrequent, irregular breaths).
- If you check the pulse take no more than 10 seconds:
 - In a child aged over 1 year – feel for the carotid pulse in the neck.
 - In an infant – feel for the brachial pulse on the inner aspect of the upper arm.
 - For both infants and children the femoral pulse in the groin (mid-way between the anterior superior iliac spine and the symphysis pubis) can also be used.

7A. If confident that you can detect signs of a circulation within 10 seconds:

- Continue rescue breathing, if necessary, until the child starts breathing effectively on his own.
- Turn the child onto his side (into the recovery position) if he starts breathing effectively but remains unconscious.

- Re-assess the child frequently.

7B. If there are no signs of life, unless you are CERTAIN that you can feel a definite pulse of greater than 60 min^{-1} within 10 seconds:

- Start chest compressions.
- Combine rescue breathing and chest compressions.

For all children, compress the lower half of the sternum:

- To avoid compressing the upper abdomen, locate the xiphisternum by finding the angle where the lowest ribs join in the middle. Compress the sternum one finger's breadth above this.
- Compression should be sufficient to depress the sternum by at least one-third of the depth of the chest, which is approximately 4 cm for an infant and 5 cm for a child.
- Release the pressure completely, then repeat at a rate of $100\text{--}120 \text{ min}^{-1}$.
- Allow the chest to return to its resting position before starting the next compression.
- After 15 compressions, tilt the head, lift the chin, and give two effective breaths.
- Continue compressions and breaths in a ratio of 15:2.
- The best method for compression varies slightly between infants and children.

Chest compression in infants:

- The lone rescuer should compress the sternum with the tips of two fingers.
- If there are two or more rescuers, use the encircling technique:
 - Place both thumbs flat, side-by-side, on the lower half of the sternum (as above), with the tips pointing towards the infant's head.
 - Spread the rest of both hands, with the fingers together, to encircle the lower part of the infant's rib cage with the tips of the fingers supporting the infant's back.
 - Press down on the lower sternum with your two thumbs to depress it at least one-third of the depth of the infant's chest, approximately 4 cm.

Chest compression in children aged over 1 year:

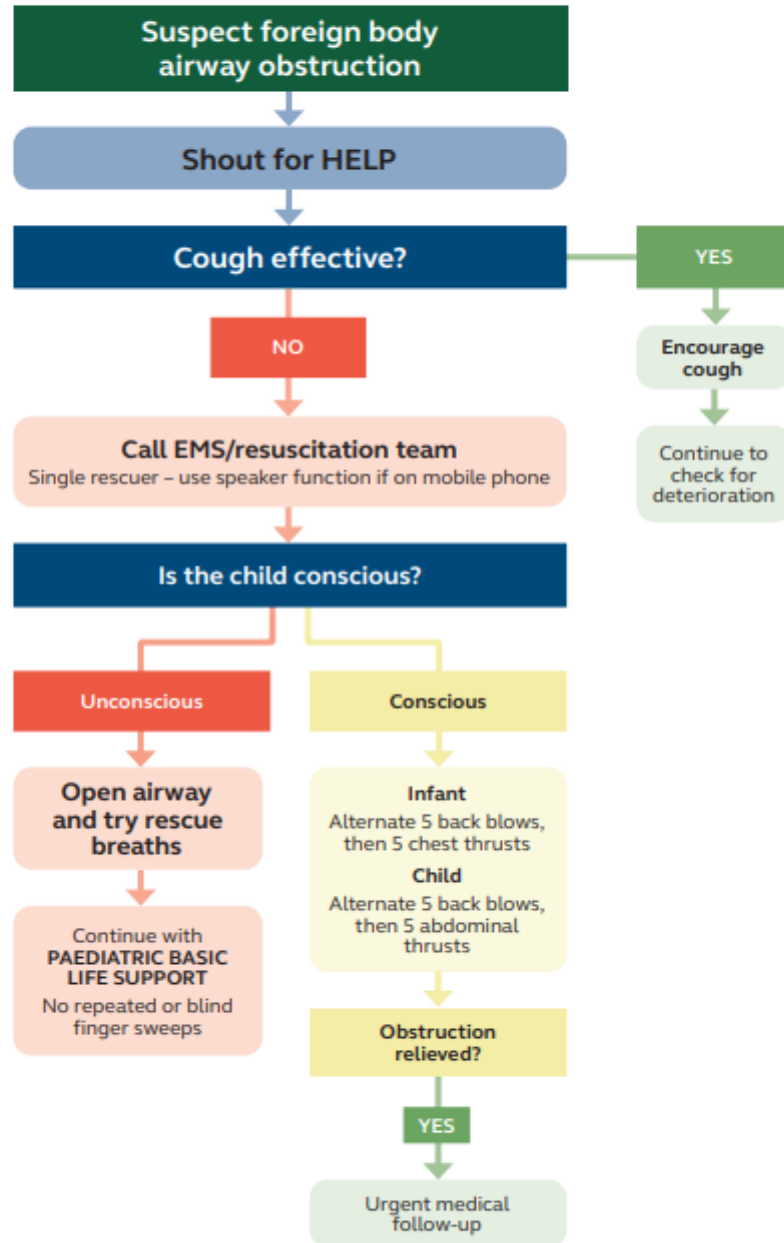
- Place the heel of one hand over the lower half of the sternum (as above).
- Lift the fingers to ensure that pressure is not applied over the child's ribs.

- Position yourself vertically above the victim's chest and, with your arm straight, compress the sternum to depress it by at least one-third of the depth of the chest, approximately 5 cm.
- In larger children, or for small rescuers, this may be achieved most easily by using both hands with the fingers interlocked.

8. Continue resuscitation until:

- The child shows signs of life (normal breathing, cough, movement or definite pulse of greater than 60 min⁻¹).
- Further qualified help arrives.
- You become exhausted.

Paediatric foreign body airway obstruction



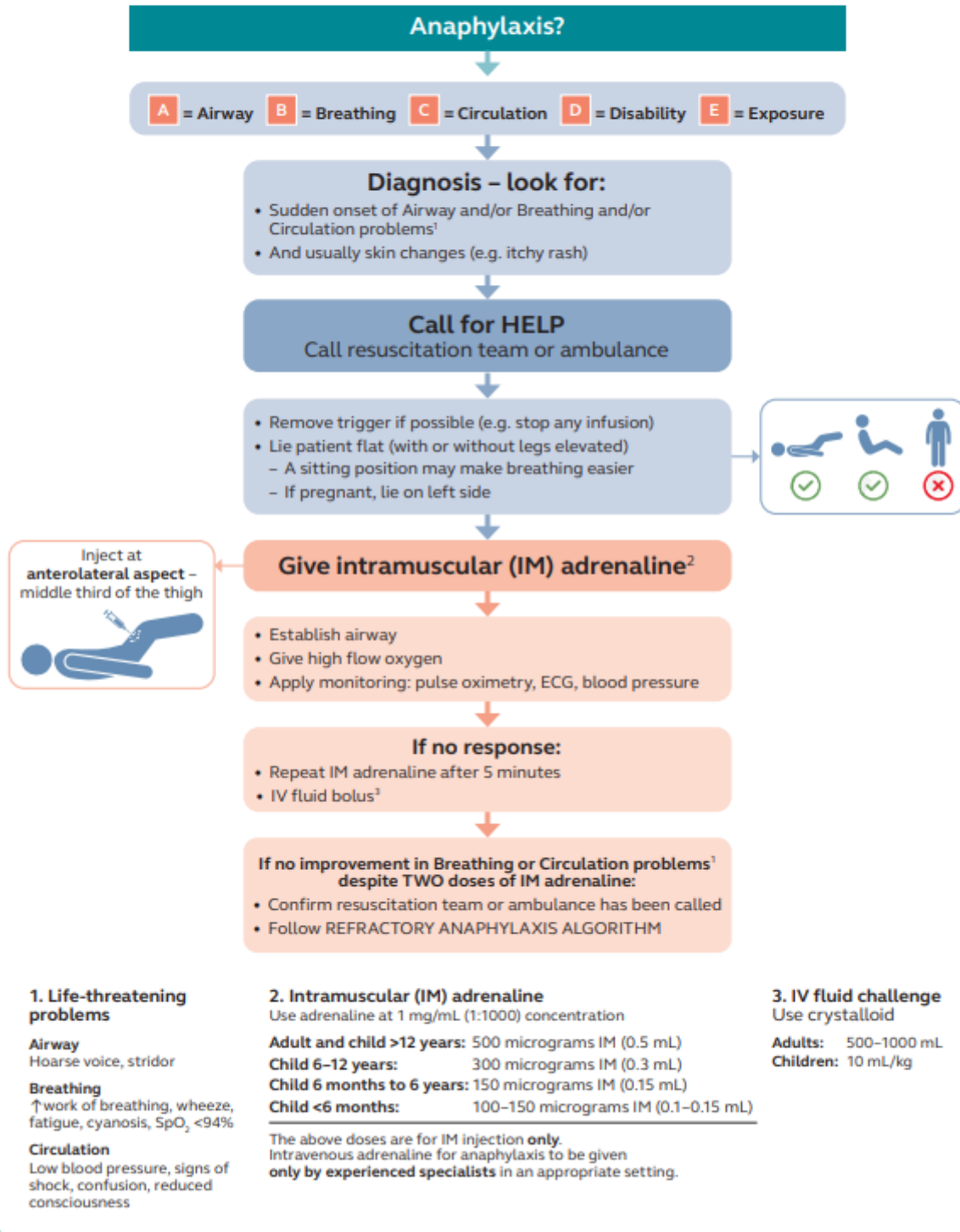
Defibrillators

At Bedford Hospital we use a standard defibrillator on every resuscitation trolley. This is a lifepak 20. In certain areas the defibrillator will have the capability to provide external pacing. These are A&E, AAU, CCU, critical care. If you require this in any other area in an emergency a pacing defibrillator can be collected from those areas.



If you require training in the use of the defibrillator please contact the cardiac arrest prevention team on ext 2304 or email on resuscitation@bedfordhospital.nhs.uk

Anaphylaxis



Recognition of the deteriorating patient

Early recognition, appropriate treatment and escalation of patients who are deteriorating is key in preventing avoidable cardiac arrests and ultimately death. It can also help avoid unnecessary admissions to Critical Care and identify patients that would not benefit from resuscitation and may need a treatment escalation plan.

It is recognised that most cardiac arrests in the hospital setting are predictable (with the exception of anaphylaxis) with increased respiratory rate, HR, a drop in blood pressure and oxygen saturations being common signs of deterioration.

As well as using the trend on the observation chart, visual impression and listening to what the patient is saying (or not) can all help to recognise early on that a patient is at risk of deteriorating and prompt treatment/escalation.

To help staff identify deterioration the hospital uses the Royal College of Physicians National Early Warning Score (NEWS2) see below. This uses scores for individual physiological parameters which when added up give a total score which then in turn triggers a clinical response, see below.

Chart 1: The NEWS scoring system

Physiological parameter	Score						
	3	2	1	0	1	2	3
Respiration rate (per minute)	≤8		9–11	12–20		21–24	≥25
SpO ₂ Scale 1 (%)	≤91	92–93	94–95	≥96			
SpO ₂ Scale 2 (%)	≤83	84–85	86–87	88–92 ≥93 on air	93–94 on oxygen	95–96 on oxygen	≥97 on oxygen
Air or oxygen?		Oxygen		Air			
Systolic blood pressure (mmHg)	≤90	91–100	101–110	111–219			≥220
Pulse (per minute)	≤40		41–50	51–90	91–110	111–130	≥131
Consciousness				Alert			CVPU
Temperature (°C)	≤35.0		35.1–36.0	36.1–38.0	38.1–39.0	≥39.1	

Staff should use the clinical response to help them escalate appropriately but also be guided on how often they should have repeat observations. However, it is encouraged that staff escalate even if the patient doesn't have a high NEWS2 score but they are concerned.

Chart 4: Clinical response to the NEWS trigger thresholds

NEWS score	Frequency of monitoring	Clinical response
0	Minimum 12 hourly	<ul style="list-style-type: none"> Continue routine NEWS monitoring
Total 1–4	Minimum 4–6 hourly	<ul style="list-style-type: none"> Inform registered nurse, who must assess the patient Registered nurse decides whether increased frequency of monitoring and/or escalation of care is required
3 in single parameter	Minimum 1 hourly	<ul style="list-style-type: none"> Registered nurse to inform medical team caring for the patient, who will review and decide whether escalation of care is necessary
Total 5 or more Urgent response threshold	Minimum 1 hourly	<ul style="list-style-type: none"> Registered nurse to immediately inform the medical team caring for the patient Registered nurse to request urgent assessment by a clinician or team with core competencies in the care of acutely ill patients Provide clinical care in an environment with monitoring facilities
Total 7 or more Emergency response threshold	Continuous monitoring of vital signs	<ul style="list-style-type: none"> Registered nurse to immediately inform the medical team caring for the patient – this should be at least at specialist registrar level Emergency assessment by a team with critical care competencies, including practitioner(s) with advanced airway management skills Consider transfer of care to a level 2 or 3 clinical care facility, ie higher-dependency unit or ICU Clinical care in an environment with monitoring facilities

Pregnant and Postnatal early warning score

A Modified Early Obstetric Warning Scoring System (MEOWS) must be undertaken and documented, regardless of location:

- when there is concern about the mother, whether in the antenatal or postnatal period, including all antenatal admissions
- following a complicated delivery, caesarean section or other major surgery

This colour co-ordinated modified early obstetric warning scoring (MEOWS) chart should be commenced accompanied by a fluid balance chart. In labour the partogram is the early warning tool of choice as it also incorporates the uterine activity and cervical dilatation. Page 4 of 12 MEOWS charts generated during an in-patient episode are to be filed in the maternity notes on discharge from hospital.

The Obstetric SHO and/or Registrar should be contacted by the midwife or nurse to attend and assess the woman if she triggers ONE RED or TWO YELLOW scores at any one time.

Consideration should be given to contacting the on-call anaesthetic registrar and/or the Outreach team. There will always be a small group of women who require high dependency care either because of their pre-existing medical conditions or because of a complication that has arisen during their pregnancy, labour/delivery or puerperium. Such women can usually be cared for in the recovery area on Delivery Suite where there will be one to one midwifery/nursing care throughout their stay.

Consideration should be given to increasing the nursing staff through using the bank to ensure appropriate care is available to the ill woman and the other women on labour ward. Clinicians outside the Maternity Service may be involved if:

- the woman has symptoms and problems outside the experience of the obstetricians and anaesthetists
- when not primarily due to pregnancy or
- involves equipment not normally used in a maternity setting. For an example the involvement of an Orthopaedic Surgeon after a road traffic accident; a General Surgeon after a road traffic accident or acute abdominal problem; or Urologist after bladder injuries.

Pregnant women of above 20 weeks gestation or who are postnatal and are being cared for in general areas must have the Modified Early Obstetric Warning Score (MEOWS) chart used as well as the general adult NEWS2. One of the main reasons for this is the systolic blood pressure trigger for the upper limit needs to have a much lower threshold in pregnant women, NEWS2 does not trigger until they have reached a systolic blood pressure of 220, which is concerning in a pregnant woman.

Please see the chart below and the response trigger, if staff feel they need more training on this please contact the resuscitation team.

SEPSIS SCREENING TOOL ACUTE ASSESSMENT

AGE 12+

PATIENT DETAILS:

DATE:

TIME:

NAME:

DESIGNATION:

SIGNATURE:

01 START THIS CHART IF THE PATIENT LOOKS UNWELL OR NEWS-2 HAS TRIGGERED

HAVE HIGH SUSPICION WITH CHILDREN WITH RISK FACTORS!

02 COULD THIS BE DUE TO AN INFECTION?

YES

LIKELY SOURCE:

- Respiratory Urine Skin / joint / wound Indwelling device
 Brain Surgical Other

NO

SEPSIS UNLIKELY, CONSIDER OTHER DIAGNOSIS

03 ANY RED FLAG PRESENT?

YES

- Objective evidence of new or altered mental state
 Systolic BP \leq 90 mmHg (or drop of $>$ 40 from normal)
 Heart rate \geq 130 per minute
 Respiratory rate \geq 25 per minute
 Needs O₂ to keep SpO₂ \geq 92%
 Non-blanching rash / mottled / ashen / cyanotic
 Lactate \geq 2 mmol/l
 Recent chemotherapy
 Not passed urine in 18 hours ($<$ 0.5ml/kg/hr if catheterised)

YES

RED FLAG SEPSIS

START SEPSIS SIX

04 ANY AMBER FLAG PRESENT?

NO

- Relatives concerned about mental status
 Acute deterioration in functional ability
 Immunosuppressed
 Trauma / surgery / procedure in last 8 weeks
 Respiratory rate 21-24
 Systolic BP 91-100 mmHg
 Heart rate 91-130 or new dysrhythmia
 Temperature $<$ 36°C
 Clinical signs of wound infection

YES

FURTHER REVIEW REQUIRED:

- SEND BLOODS AND REVIEW RESULTS
 - ENSURE SENIOR CLINICAL REVIEW within 1HR

TIME OF REVIEW: ■■■ : ■■

ANTIBIOTICS REQUIRED:

Yes No

NO AMBER FLAGS = ROUTINE CARE / CONSIDER OTHER DIAGNOSIS



UKST 2019 1.1 PAGE 1 OF 2 / UKST, REGISTERED CHARITY 1158843

01 START CHART IF ANY OF THE FOLLOWING ARE REPORTED:

- Abnormal temperature
- Appears to be breathing more quickly or slowly than normal
- Altered mental state – include sleepy, irritable, drowsy or floppy
- Abnormally pale / bluish skin or abnormally cold hands or feet
- Reduced wet nappies or reduced urine output

NO SEPSIS UNLIKELY, CONSIDER OTHER DIAGNOSIS

RISK FACTORS FOR SEPSIS INCLUDE:

- Impaired immunity (e.g. diabetes, steroids, chemotherapy)
- Indwelling lines / broken skin
- Recent trauma / surgery / invasive procedure

02 COULD THIS BE DUE TO AN INFECTION?

- LIKELY SOURCE:**
- Brain
 - Surgical
 - Other
 - Respiratory
 - Urine
 - Skin / joint / wound
 - Indwelling device

NO SEPSIS UNLIKELY, CONSIDER OTHER DIAGNOSIS

03 ANY RED FLAG PRESENT?

- No response to social cues
- Doesn't wake when roused / won't stay awake
- Weak, high-pitched or continuous cry
- Grunting or bleating noises with every breath
- Finding it much harder to breathe than normal
- Very fast breathing / 'pauses' in breathing
- Skin that's very pale, mottled, ashen or blue
- Rash that doesn't fade when pressed firmly
- Temperature <36°C (check 3 times in 10 min)
- If under 3 months, temperature ≥ 38°C

YES

RED FLAG SEPSIS START BUNDLE

04 ANY AMBER FLAG PRESENT?

IF IMMUNITY IMPAIRED TREAT AS RED FLAG SEPSIS

- Not responding normally / no smile
- Parental concern
- Wakes only with prolonged stimulation
- Significantly decreased activity
- Having to work hard to breathe
- Poor feeding in infants
- Reduced urine output
- Leg pain
- Cold feet or hands

FURTHER INFORMATION AND REVIEW REQUIRED:

- ARRANGE URGENT FACE-TO-FACE ASSESSMENT USING CLINICAL JUDGEMENT TO DETERMINE APPROPRIATE CLINICAL ENVIRONMENT

NO AMBER FLAGS : GIVE SAFETY-NETTING ADVICE:

CALL 111 IF CONDITION CHANGES OR DETERIORATES. SIGNPOST TO AVAILABLE RESOURCES AS APPROPRIATE

CALL 999 IF ANY OF:

- Is breathing very fast
- Has a 'fit' or convulsion
- Looks mottled, bluish or pale
- Has a rash that does not fade when you press it
- Is very lethargic or difficult to wake
- Feels abnormally cold to touch

TELEPHONE TRIAGE BUNDLE:

THIS IS TIME-CRITICAL – IMMEDIATE ACTION REQUIRED: DIAL 999

AND ARRANGE BLUE LIGHT TRANSFER

COMMUNICATION: Ensure communication of 'Red Flag Sepsis' to crew Advise crew to pre-alert as 'Red Flag Sepsis'



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01 START CHART IF ANY OF THE FOLLOWING ARE REPORTED:

- Abnormal temperature
- Appears to be breathing more quickly or slowly than normal
- Altered mental state – include sleepy, irritable, drowsy or floppy
- Abnormally pale / bluish skin or abnormally cold hands or feet
- Reduced wet nappies or reduced urine output

RISK FACTORS FOR SEPSIS INCLUDE:

- Impaired immunity (e.g. diabetes, steroids, chemotherapy)
- Indwelling lines / broken skin
- Recent trauma / surgery / invasive procedure

NO
SEPSIS UNLIKELY, CONSIDER OTHER DIAGNOSIS

02 COULD THIS BE DUE TO AN INFECTION?

LIKELY SOURCE:

- Respiratory
- Urine
- Skin / joint / wound
- Indwelling device
- Brain
- Surgical
- Other

NO
SEPSIS UNLIKELY, CONSIDER OTHER DIAGNOSIS

03 ANY RED FLAG PRESENT?

- Objective evidence of new or altered mental state
- Doesn't wake when roused / won't stay awake
- Not doing / interested in anything at all
- Unable to catch breath / difficult to speak
- Very fast breathing / 'pauses' in breathing
- Skin that's very pale, mottled, ashen or blue
- Rash that doesn't fade when pressed firmly
- Temperature <36°C (check 3 times in 10 min)

YES
RED FLAG SEPSIS
START GP BUNDLE

04 ANY AMBER FLAG PRESENT?

IF IMMUNITY IMPAIRED TREAT AS RED FLAG SEPSIS

- Behaving abnormally / not wanting to play
- Parental concern
- Having to work hard to breathe
- Reduced urine output
- Leg pain
- Cold feet or hands

NO
FURTHER INFORMATION AND REVIEW REQUIRED:
- ARRANGE URGENT FACE-TO-FACE ASSESSMENT USING CLINICAL JUDGEMENT TO DETERMINE APPROPRIATE CLINICAL ENVIRONMENT

NO AMBER FLAGS : GIVE SAFETY-NETTING ADVICE:

CALL 111 IF CONDITION CHANGES OR DETERIORATES. SIGNPOST TO AVAILABLE RESOURCES AS APPROPRIATE

CALL 999 IF ANY OF:

- Is breathing very fast
- Has a 'fit' or convulsion
- Looks mottled, bluish or pale
- Has a rash that does not fade when you press it
- Is very lethargic or difficult to wake
- Feels abnormally cold to touch

TELEPHONE TRIAGE BUNDLE:
THIS IS TIME-CRITICAL – IMMEDIATE ACTION REQUIRED: DIAL 999 AND ARRANGE BLUE LIGHT TRANSFER

COMMUNICATION: Ensure communication of 'Red Flag Sepsis' to crew. Advise crew to pre-alert as 'Red Flag Sepsis'



UKST 2020 TT2.2 PAGE 1 OF 1

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Paediatric Early Warning Scores

The National Paediatric Early Warning Score (PEWS) was introduced to improve communication of the deteriorating child from one health board to another. Previously there had been 14 different early warning scoring charts, all scoring differently. There are five age appropriate charts (0-11mths; 12-23mths; 2-4yrs; 5-11yrs ;> 12years).

Observations recorded on the Paediatric Early Warning Score (PEWS) include respiratory rate, heart rate, blood pressure, oxygen saturation, temperature, level of consciousness and capillary refill time. A non-physiological parameter which is scored is oxygen therapy.

Staff and /or carers concerns are also recorded and should overrule the necessity of a certain score to escalate concerns.



PEWS Form


5-12 Years

Name
 Date of Birth
 NHS Number
 Consultant
 Ward

Frequency of obs	Date	30/11							
Every _____	Time	18:00							
_____ hourly	Initial	5304							

Doctor/Name/Family concern?

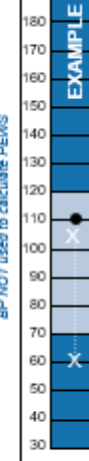
A

Respiratory Rate (Over 1 minute)									
									
Respiratory Rate (number)		55							

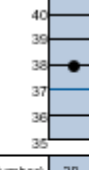
B

Respiratory Distress	Severe/Mod	<input checked="" type="checkbox"/>							
	Mild/None	<input type="checkbox"/>							
O ₂ Saturation %		95							
Receiving O ₂ l/min		2							

C

Heart Rate & Blood Pressure									
									
Heart Rate (Number)		110							

Conscious Level	Normal	<input type="checkbox"/>							
	Decreased	<input checked="" type="checkbox"/>							

Temperature °C									
									
Temperature (Number)		38							

0-2	3-4	5-6	7-9	5	PTO	For Action	Total PEWS = Number of entries of shaded boxes	PTO	For Action



PEWS Form

5-12 Years

Name
Date of Birth
NHS Number
Consultant
Ward

PEWS Escalation Aid

S **Situation:**
I am (name), a nurse on ward (X)
I am calling about (child X)
I am calling because I am concerned that...
(e.g. BP is low/high, pulse is XXXX
temperature is XX, Early Warning Score is XX)

B **Background:**
Child (X) was admitted on (XX date) with
(e.g. respiratory infection)
They have had (X operation/procedure/investigation)
Child (X)'s condition has changed in the last (XX (m)ns)
Their last set of q&qs were (XXX)
The child's normal condition is...
(e.g. alert/drowsy/confused, pain free)

A **Assessment:**
I think the problem is (XXX)
and I have...
(e.g. given O2/analgesia, stopped the infusion)
OR
I am not sure what the problem is but child (X)
is deteriorating
OR
I don't know what's wrong but I am really worried

R **Recommendation:**
I need you to...
Come to see the child in the next (XX (m)ns)
AND
Is there anything I need to do in the meantime?
(e.g. stop the fluid/repeat the q&qs)

Download SBAR prompt cards and pads at
www.institute.nhs.uk/SBAR

Remember: If you feel you need more help at any time,
call for help – regardless of PEW Score

0 1 Continue monitoring

2 Nurse in charge **MUST** review

3 Nurse in charge & Doctor **MUST** review

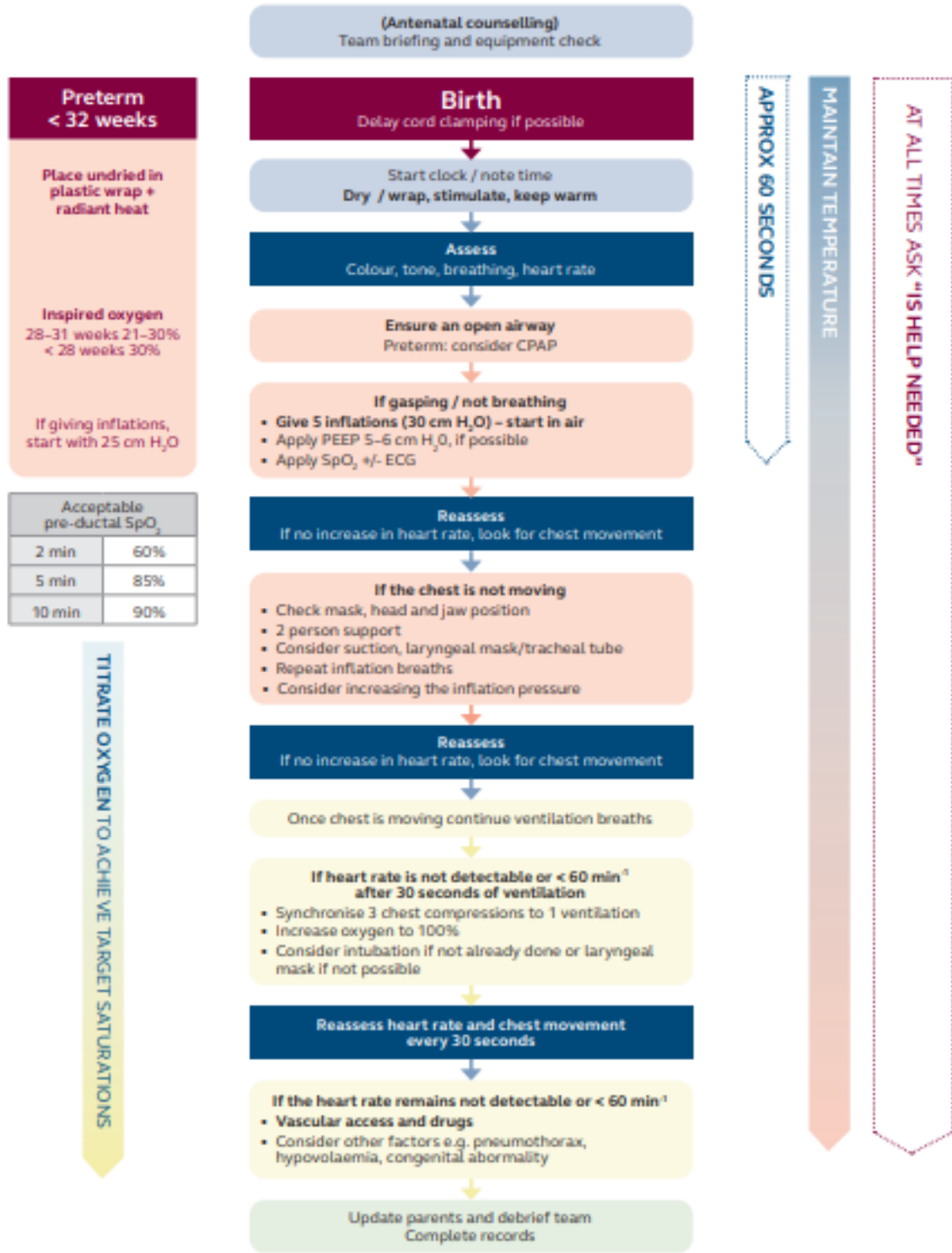
4 Nurse in charge & Doctor **MUST** review & inform Consultant

5 6 Nurse in charge & Consultant **MUST** review

Record Call When PEWS 3 Or More				Record Time of Review, Who by & Plan		
Date	Time	PEWS	Print Name (nurse)	Time	Plan	Print Name
01/01/12	09:00	5	SN Morton	09:15	ED consultant called Anaesthetic review	Sister JACKS



Newborn life support



Using a portable oxygen cylinder



1. Check you have the correct medical gas by checking the cylinder label



2. Check the expiry date on the batch label



3. Make sure that you have enough gas for the required duration of therapy*



1. Remove the tamper evident seal by pulling the tear ring.



2. Pull down the hinged valve outlet cover.



3. Turn on the cylinder by fully rotating the hand wheel anticlockwise



1. Attach the tubing securely to the valve outlet.



2. Set the prescribed flow by rotating the dial flow selector.



3. Check the contents gauge regularly to ensure there is sufficient gas.

Version 3

September 2020

Resuscitation Trolleys

All resuscitation trolleys **MUST** be checked daily and signed for by ward/ department staff. The monthly checklists **MUST** be returned to the resuscitation department by either email to resuscitation@bedfordhospital.nhs.uk or by internal post to the resuscitation training department, Cauldwell Centre, Bedford Hospital.

Cardiac Arrest Trolley Equipment List

Where security tag is in place ensure rest of trolley is checked **DAILY** in accordance with the Clinical Guidelines for checking resuscitation equipment. Once weekly the tag should be broken and whole Resuscitation trolley checked.

Replacement of Equipment

- Replacement of Adrenaline will be from Pharmacy in normal working hours. Out of hours Adrenaline can be obtained from **CCU**.
- Any used equipment from the airway drawer can be replaced from a **BLUE Airway Box** that the general porters will collect on request from A+E.
- Replacement defibrillator pads, Bag Valve Mask and monitor electrodes (pack of 3), bougie, must be collected from the **Resus stock** held in the resus cupboard which is situated by the lifts on the first floor, the key is held with CCU
- **All other equipment** must be replaced from the **ward stock**.
- Anaphylaxis kits and hypo boxes are replenished by pharmacy.

Any queries please contact the Resuscitation team on ext. 2304, bleep 403, 102 or 338 or email resuscitation@bedfordhospital.nhs.uk

Cardiac Arrest Trolley Equipment List

Top of trolley

Defibrillator (**spare battery for AED if appropriate**) please note that if the battery light gets to 1 bar it will need replacing!

Pack of 3 monitor electrodes (**DO NOT OPEN** until required)

Pack of defibrillation pads (**DO NOT OPEN** until required)

Suction Unit

Airway Drawer

Single use laryngoscope handle and blade (size 3 & 4) in sealed packet – **check bulb by depressing button on top of handle**

Oral airways size 2, 3 & 4

I gel size 4

Endotracheal tubes sizes 7, 8 & 9 (uncut)

Catheter mount with swivel connector (for ET tube)

Intubation bougie

10ml syringe

Magills Forceps **disposable**

Lubricating gel

Bandage (for tying ET tube in place)

Razor

“tuff” cut scissors for use of cutting ligatures

Breathing Drawer

Non rebreath oxygen mask

Bag Valve mask. **NB: Two person technique required.**

Yankeurs x 4

Suction catheters – various sizes

Arterial Blood Gas Syringe

Stethoscope

Circulation Drawer

Cannulae: Pink x 2, Green x 4, Grey x 4 including securing tegaderm

Syringes 10ml x 6, 20ml x 4

Needles Green/White x 10

Chloroprep

Normal saline 10mls x 5 (for flushing)

Tourniquets x 2

Blood bottles x1 of each

Blood giving set x1

500ml 10% Dextrose x1

500ml Hartmans x2

Giving sets x4

Drugs Drawer

Adrenaline 1:10,000 x4

Anaphylaxis Kit

Hypo Box 1 litre Sharps box – **please do not sign and date until it is used in resuscitation, seal and replace after use.**

Checklist

Have you.....

Read all of the guidance?

Checked that you have read, understood and are able to apply in your role?

*Made a booking with the Resuscitation team to attend face to face Basic Life Support Assessment?
(See appendix A)*

Please complete the following details and return this page to the Education Centre. Your record will be updated once we have received a copy of your details from the Resuscitation Team confirming assessment has taken place and the required standard achieved.

Full Name (please Print)	
Department	
Topic	Resuscitation Training
Date Read	
Signature	

Alternatively, you can email your completed form to:

EducationCentreBookings@bedfordhospital.nhs.uk

Appendix A

If you work in the following areas, you will be required to undertake face to face training:

- All nursing staff employed by Bedford Hospital NHS or Moorfields
- Nursing staff working with paediatrics will require additional face to face training.

To undertake face to face training please attend basic life support drop-in sessions

To arrange bespoke Cardiac Arrest Prevention/ Basic Life Support training/ ILS/ PILS please contact:

Resuscitation & Deteriorating Patient Team

Email: resuscitation@[bedfordhospital.nhs.uk](mailto:resuscitation@bedfordhospital.nhs.uk) /

Ext: 2304